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UTILITY PATENT APPLICATION

Attorney Docket No.		No.	2557-000156/US
First In	ventor	San	g-Joon HWANG
Title	SEMICO ARCHIT		CTOR MEMORY HAVING SENSE AMPLIFIER JRE

	IRAN	ISMITTAL	•	Title	ARCHITECTURE	T MEMORT HAV	AING SENSE AMPLIFIER		
(Only for n	ew nonprovisional	applications under	37 C.F.R. 1.53(b))	,,,,,				J	
	APPLI	CATION ELE	MENTS	A	ADDRESS TO	Box Patent P.O. Box 14			
2.	Submit an original and Applicant claims Gee 37 CFR 1.27 Specification oreferred arrangen Descriptive title of Cross References Statement Regard Reference to sequor a computer progate Background of the Brief Summary of	[Tot nent set forth below) the Invention to Related Applicati ing Fed sponsored tence listing, a table gram listing appendic Invention the Invention of the Drawings (if finds)	cessing) s. al Pages 25 ons R & D	£ 10	Alexandria, VA 22313-1450 7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATIONS PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 C.F.R.§3.73(b) Statement Power of (when there is an assignee) Attorney 11. English Translation Document (if applicable)				
5. Oath or I	Copy from a pri (for a continuat DELETION (Signed statemer named in the pri 1.63(d)(2) and 1	[Tot d (original or copy ior application (37 tion/divisional with DF INVENTOR(at attached deleting or application, see 3	CFR 1.63 (d)) a Box 18 completed S) inventor(s) 7 CFR	12 15 14 19 19	12. Information Disclosure				
or in an App Conti Prior app For CONTIN under Box 5	olication Data She inuation Colication informatio IUATION or DIVIS 5b, is considered	eet under 37 CFR Divisional Examine CONAL APPS only: a part of the disclo	1.76: Continuation-in-p The entire disclosure of the accompa	oart (CIP	of pri Grou prior application, fi	or application No p / Art Unit: rom which an oa ilon and is herel	ath or declaration is supplied by incorporated by reference.		
			17. CORRESP	ONDE	NCE ADDRESS		····		
☑ Custon	mer Number or Bar			59 0593 Attach		or 🗆 Co	orrespondence address below		
Name	Harness, Dick	ey & Pierce, P.L.0	D						
Address	P.O. Box 8910							_	
City	Reston State		VA		Zip Code	20195			
Country	United States	of America	Telephone	70:	3-668-8000	703-668-8200			
Name (Pr	rint/Type)	Gary D. Yacura		Reg	Registration No. (Attorney/Agent) 35,416				
Signature)	1		2_		Date	July 14, 2003		
Burden Hour	Statement: This	orm is eximated to	take 0.2 Moure to to	mnlete	Time will yary denen	ding upon the ne	eeds of the individual case. An	. ·	

Burden Hour Statement: The form is estimated to take 0.22 pours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

PTO/SB/17 (01-03)
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_/	FEE TO ANOMITTAL	Complete if Known				
8334 U.S.	FEE TRANSMITTAL	Application Number	New Application			
4	for FY 2003	Filing Date	July 14, 2003			
		First Named Inventor	Sang-Joon HWANG			
]	Patent fees are subject to annual revision.	Examiner Name	Unassigned			
	Applicant claims small entity status. See 37 CFR 1.27	Group / Art Unit	Unassigned			
E &	TOTAL AMOUNT OF PAYMENT (\$) 952	Attorney Docket No.	2557-000156/US			

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
☑ Check ☐ Credit card ☐ Money ☐ Other ☐ None		DITIONAI I I	1	a ta		
Order Deposit Account:		Entity	Small E			
P	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Pald
Deposit O8-0750	1051	130	2051	65	Surcharge - late filing fee or oath	
Number	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
Deposit	1053	130	1053	130	Non-English specification	
Account Harness, Dickey & Pierce, P.L.C.	1812	2,520	1812	2,520	For filing a request for reexamination	
Name The Commissioner is authorized to: (check all that apply)	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
☐ Charge fee(s) indicated below ☑ Credit any overpayments ☑ Charge any additional fee(s) during the pendency of this application	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
☐ Charge fee(s) indicated below, except for the filing fee	1251	110	2251	55	Extension for reply within first month	
to the above-identified deposit account. FEE CALCULATION	1252	410	2252	205	Extension for reply within second month	
	1253	930	2253	465	Extension for reply within third month	
1. BASIC FILING FEE Large Entity Small Entity	1254	1,450	2254	725	Extension for reply within fourth month	
Fee Fee Fee Fee Description	1255	1,970	2255	985	Extension for reply within fifth month	
Code (\$) Code (\$) Fee Pald 1001 750 2001 375 Utility filing fee 750	1401	320	2401	160	Notice of Appeal	
	1402	320	2402	160	Filing a brief in support of an appeal	
1002 330 2002 165 Design filing fee 1003 520 2003 260 Plant filing fee	1403	280	2403	140	Request for oral hearing	\Box
1004 750 2004 375 Reissue filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1005 160 2005 80 Provisional filling fee	1452	110	2452	55	Petition to revive – unavoidable	
SUBTOTAL (1) (\$) 750	1453	1,300	2453	650	Petition to revive - unintentional	
(4) 7.55	1501	1,300	2501	650	Utility issue fee (or reissue)	
2. EXTRA CLAIM FEES	1502	470	2502	235	Design issue fee	
Extra Fee from Fee	1503	630	2503	315	Plant issue fee	
Claims below Paid Fotal Claims 29 -20 ** = 9 X 18 = 162	1460	130	1460	130	Petitions to the Commissioner	
ndependent	1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
Claims 2 -3** = 0 X 84 = 0	1806	180	1806	180	Submission of Information Disclosure Stmt	
Multiple Dependent Large Entity Small Entity	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40
Fee Fee Fee Fee Pescription	1809	750	2809	375	Filing a submission after final rejection	,
Code (\$) Code (\$)	1010	750	0010	075	(37 CFR § 1.129(a))	
1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3	1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1203 280 2203 140 Multiple dependent claim, if not paid	1,,,,					
1204 84 2204 42 ** Reissue independent claims over	1801	750	2801		Request for Continued Examination (RCE)	
original patent	1802	900 1	l 1802	900	Request for expedited examination of a design application	
1205 18 2205 9 Over original patient	Other f	ee (speci	fy)			
SUBTOTAL (2) (\$) 162				- C D	id CURTOTAL (2)	<u> </u>
<u> </u>	*Redu	ced by Ba	asıc Filin	g Fee Pa	aid SUBTOTAL (3) (\$) 40	
**or number previously paid, if greater; For Reissues, see above						

SUBMITTED BY Complete (if applicable)							
Name (Print/Type)	Gary D. Yacura	Registration No. Attorney/Agent)	35,416	Telephone	703-668-8000		
Signature	1			Date	July 14, 2003		